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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,383	01/13/2004	Sio Kuan Lam	20229.0009	9958
23517	7590	11/16/2006	EXAMINER	
BINGHAM MCCUTCHEN LLP 3000 K STREET, NW BOX IP WASHINGTON, DC 20007			DOAN, JENNIFER	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/755,383

Applicant(s)

LAM ET AL.

Examiner

Jennifer Doan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The amendment, filed on August 22, 2006, has been considered and entered.

Claims 1-19 are now pending.

Claim 1 is amended. The previous ground of rejection is now changed in this Office Action in response to amendment of claim 1. Since the new ground of rejection is necessitated by the amendment, this office action is made final.

### ***Specification***

1. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-8 and 12-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Tatch (U.S. Patent 5,175,783).

With respect to claims 1 and 2, Tatch (figures 12A and 18) discloses an optical assembly for coupling an optical device to an optical receiver, comprising a lens (column 13, lines 38-39) comprising a reflecting curved surface (4e) for bending and

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confining a light beam and a focusing curved surface (4c) for focusing the light beam, the lens (14) conveying the light beam between the optical device (3) and the optical fiber (F) by reflection off of the reflecting curved surface and transmission through the focusing curved surface, wherein the lens includes an elongated, non-spherical section (see figure 18) and the path of the light beam traverse the elongated non-spherical section between the reflecting curved surface (4e) and the focusing curved surface (4c); wherein the reflecting surface (4e) and the focusing spherical surface (4c) are part of an integrated lens.

With respect to claim 3, Tatch (figure 18) discloses the optical assembly, wherein the reflecting curved surface (4e) controls the divergence angle of the reflected beam before being focused by the focusing curved surface (4c).

With respect to claim 5, Tatch (figure 15) discloses the optical assembly, wherein the lens is a lens assembly having at least two mating parts, a first mating part including the reflecting surface (4e) and the second mating part (32) including the focusing surface.

With respect to claims 6 and 7, Tatch (figure 15) discloses the optical assembly, wherein the first and second mating parts include mating surfaces (see figure 15) for engaging each other and wherein the mating surfaces are in the optical path of the beam and at least one of the mating surfaces has a reflective portion shaped to reflect a portion of the beam and the mating surfaces each include at least one alignment surface that facilitates alignment of the mating surfaces during engagement (see figure 15).

With respect to claim 8, Tatch (figure 15) discloses the optical assembly, wherein the reflective portion of at least one of the mating surfaces includes a coating (31) to create reflection of the beam.

With respect to claims 12 and 13, Tatch (figures 12A and 18) discloses the optical assembly, wherein the optical device is a light device (3) and the optical receiver is an optical fiber (F) for sending out the light; further the optical device is an optical fiber (F) and the optical receiver is a light receiving device (3).

With respect to claims 14 and 15, Tatch (figure 18) discloses the optical assembly, wherein the curved reflecting surface (4e) is a parabolic surface and the curved focusing surface (4c) is a spherical surface (see figure 18).

With respect to claims 16 and 17, Tatch discloses the optical assembly, wherein the curved reflecting surface (4e) internally reflects the beam into the material that comprises the lens and wherein the curved reflecting surface externally reflects the beam off of the material that comprises the lens (column 13, lines 38-39).

With respect to claims 18 and 19, Tatch (figure 16) discloses the optical assembly, wherein the reflecting surface (4e) bends the light beam 90 degree and collimates the light beam after the reflection (see figure 16).

A detailed cross-sectional diagram of a mechanical or structural component. The top part features a curved upper boundary labeled '1'. Below this curve is a hatched rectangular area labeled '4'. To the left, a dashed line indicates a path or interface labeled '4c'. On the right side, there are several labels: '31' near the top edge, '31a' further down, and '3a' below that. At the bottom right, three parallel, slightly angled bars are shown, collectively labeled '2'. Individual bars are labeled '5' and '6', with their lower ends specifically labeled '5a' and '6a' respectively.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatch (as cited above) in view of Brauss (U.S. Patent 3,628,027).

With respect to claims 4 and 9, Tatch substantially discloses all the limitations of the claimed invention except Tatch does not disclose a monitoring unit.

However, Brauss (figure 1 and column 1, lines 7-11 and 44-46) disclose a monitoring unit to monitor the deflecting and focusing of a light beam emitted from a light source. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lens system of Tatch to include the monitoring unit (accordance with the teaching of Brauss) for the purpose of facilitating to monitor and control the beam deflecting and focusing system to ensure a reliable functioning of the system.

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7. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatch (as cited above) in view of Michikoshi et al. (U.S. Patent 5,388,171).

With respect to claims 10 and 11, Tatch substantially discloses all the limitations of the claimed invention except Tatch does not disclose a translucent block positioned between the lens and the end of the fiber. However, Michikoshi et al. (figure 1) clearly disclose a translucent block positioned between the lens (2) and the end of the fiber (3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lens system of Tatch to include the translucent block between the lens and the fiber end (accordance with the teaching of Michikoshi et al.) for the purpose of alleviating the reflection noise.

### ***Response to Arguments***

8. Applicants' argument filed on August 22, 2006 has been fully considered.

9. With respect to claims 1-19, it is argued that Taira-Griffin fails to disclose a lens includes an elongated, non-spherical section through which the path of a light beam passed between a reflecting curved surface and a focusing curved surface (on pages 5-6 of the remarks).

The examiner fully agrees with these applicants' arguments that Taira-Griffin fails to disclose the above features. However, the examiner respectfully submits that a new ground of rejection based on the newly cited reference has been applied to claims 1-19



in response to the amendment of the claims. Please refer to claim rejections 35 U.S.C. 102(b) and 103(a) above.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

November 3, 2006

  
JENNIFER DOAN  
PRIMARY EXAMINER